

San Luis Obispo County Integrated Proposal Monitoring, Assessment, and Performance Measures

Monitoring, Assessment, and Performance Measures

Attachment 6 describes the performance measures that will be used to quantify and verify each of the three projects' performance. It includes a discussion of the monitoring system to be used to verify projects' performance with respect to the project benefits and objectives identified in the San Luis Obispo County Integrated Proposal. Where the data will be collected and the types of analyses to be used is described for each project and a discussion of how monitoring data will be used to measure the performance in meeting the overall goals and objectives of the Plan is also included. The Project Performance Measures Tables for each of the proposal's three projects are attached and serve as a preview of the information that would go into monitoring plans for the projects.

The planned monitoring, assessment and performance measures demonstrate that the Proposal will meet its intended goals, achieve measurable outcomes, and provide value to the State of California. Planned monitoring programs for surface water and groundwater will comply with all State of California requirements for the California Statewide Groundwater Elevation Monitoring Program, Surface Water Ambient Monitoring, Groundwater Ambient Monitoring and Assessment Programs and other Statewide Monitoring programs as applicable. The County will be taking data provided from project proponents via quarterly reports and the Project Performance Monitoring Plans for integration into applicable Statewide Monitoring programs. Monitoring programs are also being coordinated through the IRWM planning process to identify regional data gaps and reduce duplicate efforts.

Statewide Monitoring Programs

California Statewide Groundwater Elevation Monitoring

In November 2009, California Legislature passed SBX7 6, which establishes collaboration between local monitoring parties and the California Department of Water Resources (DWR) to collect groundwater elevations statewide and that this information be made available to the public. In accordance with SBX7 6, the DWR developed the California Statewide Groundwater Elevation Monitoring (CASGEM) program which establishes a permanent, locally-managed system to monitor groundwater elevations in California's alluvial groundwater basins and subbasins identified in DWR Bulletin 118.

The San Luis Obispo County Flood Control and Water Conservation District (District) intends to participate in the CASGEM program by working cooperatively with the DWR and other stakeholders to identify potential Monitoring Entities for each basin and subbasin, to develop and implement monitoring programs as required by the CASGEM program, and to perform other functions as required by SBX7 6. The Board acted on December 14, 2010 to approve formally notifying the DWR that the District will participate in the CASGEM program. All groundwater monitoring programs that are included as monitoring measures for the Proposal will comply with CASGEM Program requirements.

Surface Water Ambient Monitoring Program (SWAMP)

All surface water monitoring programs that are included as monitoring measures for the Proposal will comply with Surface Water Ambient Monitoring Program (SWAMP) data formatting, as detailed on the Marine Pollution Studies Laboratory at Moss Landing Marine Laboratories website (<http://mpsl.mlml.calstate.edu/swdbcompare.htm>). The use of SWAMP data formatting will ensure that water quality information collected by the project proponents can be included in the SWAMP database to enhance data sharing across the state.

Groundwater Ambient Monitoring and Assessment (GAMA)

All groundwater monitoring programs that are included as monitoring measures for the Proposal will comply with Groundwater Ambient Monitoring and Assessment (GAMA) Program requirements as detailed on the State Water Resources Control Board Water Quality Website (www.waterboards.ca.gov/gama). Participation in the GAMA voluntary program will ensure that groundwater quality information collected by the project proponents can be used to better understand and protect the state's groundwater resources.

The Prioritized Basin Assessment specified in AB 599, as part of the Groundwater Ambient Monitoring and Assessment (GAMA), will provide the region with detailed groundwater quality data that can be incorporated into and compared with existing monitoring data results. The Pajaro Valley Groundwater Basin (PVGB) has been identified as a Level 2 priority basin for the GAMA Prioritized Basin Assessment being conducted by the U.S. Geological Survey (USGS) and Lawrence Livermore National Laboratory (LLNL) (USGS Website). The PVGB is part of the Monterey Study Unit and was scheduled for sampling in the summer of 2005. The results of this sampling have not been published.

Other Statewide Monitoring Programs

Water Data Library – DWR maintains the State's WDL which stores data from various monitoring stations, including groundwater level wells, water quality stations, surface water stage and flow sites, rainfall/climate observers, and water well logs.

California Environmental Information Catalog – The California Natural Resources Agency maintains the CEIC, which is a statewide metadata clearinghouse for geospatial data. The online directory is used for reporting and discovery of information resources for California. Participants include cities, counties, utilities, State and federal agencies, private businesses, and academic institutions that have spatial and other types of data resources.

Integrated Water Resources Information System – DWR maintains the Integrated Water Resources Information System (IWRIS), which is a data management tool for water resources data and not a database. IWRIS is a web based GIS application that allows entities to access, integrate, query, and visualize multiple sets of data simultaneously.

California Environmental Resources Evaluation System – CERES is an information system developed by the California Natural Resources Agency to facilitate access to a variety of electronic data describing California's rich and diverse environments. The goal of CERES is to improve environmental analysis and planning by integrating natural and cultural resource information from multiple contributors and by making it available and useful to a wide variety of users.

Los Osos Community Wastewater Project

Project Goals

The following are goals related to water resources for the Los Osos Community Wastewater Project:

- Eliminate wastewater discharges from septic systems in high-density residential areas, including failing septic systems.
- Reduce nitrate concentrations in groundwater to below the drinking water standard.
- Decrease pathogen levels in groundwater seeps, storm water runoff, and Morro Bay Estuary.
- Reduce high water table conditions and flooding in low-lying areas, while preserving existing wetland habitat.
- Reduce average indoor water use to 50 gal/person/day through implemented water conservation measures.
- Recycle all collected wastewater and reuse within the groundwater basin area.
- Increase the safe yield of the Los Osos Valley Groundwater Basin (Basin).
- Mitigate sea water intrusion.
- Improve the community's ability to manage water resources.

These goals represent major improvements to local water resources. Each goal is described below and includes references to the following Coastal Development Permit Conditions for the project as appropriate (Exhibit A):

Condition 87 – Groundwater Monitoring
Condition 92 – Habitat Conservation Plan
Condition 97 – Treated Effluent Re-use
Condition 99 - Conservation
Condition 103 - Retrofits
Condition 108 - Metering
Condition Coastal 3, 3b – Habitat Management Plan
Condition Coastal 5 – Basin Recycled Water Management Plan

Eliminate discharges from septic systems in high-density residential areas, including failing septic systems.

There are approximately 6-10 residential septic systems per acre in most areas of Los Osos, which is considered high-density. Ground water monitoring data indicates that nitrate concentrations are greater, often exceeding drinking water standards, beneath areas with high-density septic systems, compared to areas averaging one septic system or less per acre (Cleath & Associates, Nitrate Monitoring Program quarterly reports, 2002-2006, and Regional Water Board correspondence, 2006). In addition, there are developed areas in Los Osos, particularly near the Morro Bay Estuary, where ground water is less than 10 feet below ground surface. These are areas where leach fields discharge directly into, or a few feet above ground water, and where failing septic systems are sources of ground water and surface water pollution. Failing septic systems are not limited to shallow water areas, however. Removing these sources of pollution by decommissioning all septic systems in high-density areas (defined by the Regional Water Board prohibition zone) is the primary goal of the Los Osos Wastewater Project.

Reduce nitrate concentrations in ground water to below the drinking water standard

Ground water monitoring data show nitrate as nitrogen concentrations in shallow ground water are in excess of the State drinking water standard of 10 mg/l (Cleath & Associates, Nitrate Monitoring Program quarterly reports, 2002-2006). Several upper aquifer water purveyor wells have been taken out of service due to increased nitrate concentrations over the last two decades. The wastewater project will significantly reduce the nitrogen loading to the basin by removing high-density septic system discharges. Under project conditions, nitrate concentrations in shallow ground water are expected to decline to levels below the drinking water standards in most areas. This goal is also reflected in general in Condition Coastal 5. The length of time required for the equilibration of nitrate concentrations to wastewater project conditions is estimated to be on the order of two to three decades (Yates and Williams, 2003).

Recycle all collected wastewater and reuse within the groundwater basin area.

In accordance with Conditions 97 and Coastal 5, all collected wastewater will be recycled and reused within the groundwater basin area. The highest priority shall be given to replacing potable water uses with tertiary treated effluent consistent with Water Code Section 13550. The other reuse sites include agricultural re-use and environmental reservations within the basin.

Decrease pathogen levels in ground water seeps, storm water runoff, and Morro Bay Estuary

Certain types of viruses, bacteria, and protozoans are pathogenic. Many pathogens, including infectious hepatitis, streptococci, salmonella, and E. coli may be present in septic system discharges. Coliform bacteria are commonly used to screen water samples as indicators for potential pathogenic organisms, and have been detected in:

- Los Osos shallow ground water at spring seeps
- In urban storm water runoff
- In local creek flows
- In the Morro Bay Estuary

Sources: (Kitts et al, 2002, Morro Bay NEP 2006, Regional Water Board TMDL progress Report 2007).

There have been numerous reports of failed septic systems associated with flooding along streets and yards in residential neighborhoods, exposing residents to potentially harmful pathogens (EDA and Morro Group, 1997, Los Osos/Baywood Park Drainage Study, Appendix B). Elevated levels of fecal bacteria have forced closures of public bay access and of commercial shellfish harvesting. DNA ribotyping of coliform bacteria from spring seeps adjacent to the bay show the greatest percentage of *E. coli* strains found in the seeps were from human waste (Kitts et al, 2002). The Los Osos Wastewater Project will decrease pathogen levels in water resources throughout the community by collecting the septage for treatment and disinfection prior to disposal. This goal is also reflected in general in Condition Coastal 5.

Reduce high water table conditions and flooding in low-lying areas, while preserving existing wetland habitat.

Hydrographs from shallow wells in Los Osos show that water levels have risen 10-30 feet in several areas of the basin following the onset of rapid development in the early 1970's. Currently, low-lying areas are susceptible to daylighting of shallow ground water in wet years, which exacerbates flooding problems. The Los Osos Wastewater Project will eliminate septic return flows in low-lying areas, reducing shallow water levels and, as a result, reducing the extent and duration of flooding in these areas during storm events (EDA and Morro Group, 1997, Los Osos/Baywood Park Drainage Study). All collected and treated wastewater will then be reused in the basin in a way that preserves existing wetland habitat and in accordance with Condition 87.

Reduce average indoor water use to 50 gal/person/day through implemented water conservation measures.

A key component to improving the water supply reliability for the Los Osos community is to use water efficiently. Reducing average indoor water use to 50 gallons per person per day through implemented water conservation measures is also a condition for implementing the project (Conditions 99, 103, 108, Coastal 5b). These conservation measures include retrofit and installation of low water use fixtures and gray water systems.

Increase the long-term safe yield of the Los Osos Valley ground water basin

The Los Osos Wastewater Project, with the water supply components proposed, will increase the long-term safe yield of the basin by putting wastewater to beneficial use and mitigating additional sea water intrusion. The current amount of sea water intrusion is estimated at 460 acre-feet per year with the community-wide use of septic systems. By collecting and treating wastewater for percolation and reclaimed water uses, together with conservation, the total groundwater supply available to basin users will remain at current levels while providing increased water supply from recycled water and mitigating additional sea water intrusion, as described below. (See Conditions 97, 99, 103 and Coastal 5)

Mitigate sea water intrusion

Historically, chloride concentrations in lower aquifer production wells on the west side of the community were between 30 and 50 mg/l. Beginning in the late 1990's, however, chloride concentrations began to rise and have exceeded primary and secondary drinking water standards in some locations. The source of increasing chlorides in the western portion of lower aquifer is sea water intrusion, which has been advancing inland at a rate of 60 feet per year over the last 20 years (Cleath & Associates, 2005). Sea water intrusion will continue to degrade water quality in the basin if water purveyors do not reduce extractions from the lower aquifer. To accomplish this, purveyors must re-establish domestic production from the shallow aquifer in areas currently impacted by nitrates. The Los Osos Wastewater Project will lower nitrate concentrations in the shallow aquifer and remove sources of pathogens, providing the critical first step in restoring the shallow aquifer for beneficial use in domestic supply. The wastewater reuse component of the project, together with a water conservation program, and the planned water purveyor shifts in well production, can fully mitigate the existing sea water intrusion and provide a sustainable, local water supply for the community. Further, Condition 97 requires treated effluent disposal be prioritized to reduce seawater intrusion and return/retain water to/in the Los Osos groundwater basin.

Improve the community's ability to manage water resources

Currently, effluent from septic systems in Los Osos serves no beneficial use and cannot be effectively managed. The Los Osos Wastewater Project will assume direct control over the community's wastewater, allowing it to be treated and managed for beneficial use. This is made possible by the infrastructure of a collection system, treatment plant, and targeted disposal/reuse system. The permit for implementing the project also has several conditions (listed above) that will also help the community manage water resources.

Monitoring Programs

Performance measures are used to evaluate and document success in achieving both project and overall watershed goals. These measures typically involve some form of monitoring. Conditions 87, 103, 108, Coastal 3 and Coastal 5 outline required monitoring programs for the project. These other pertinent monitoring programs have also been evaluated for performance measures, and are described below:

- Interlocutory Stipulated Judgment Basin Management and Monitoring Requirements
- MBNEP Volunteer Monitoring Program
- Central Coast Ambient Monitoring Program
- RWQCB Storm Water Runoff Monitoring
- SLO County Water Level Monitoring
- Los Osos Nitrate Monitoring Program
- Water Purveyor Supply Well Monitoring
- Sea Water Intrusion Monitoring Program

Condition 87 – Groundwater Level Monitoring and Management Plan

Concurrent with the operation of the facility, the County is required to implement a Groundwater Level Monitoring and Management Plan that details methods for measuring and responding to changes in groundwater levels that could affect wetland hydrology and habitat values. The will need to include provisions for monitoring groundwater levels, surveying for wetland plants and animals, monitoring wetland hydrology and water quality, appropriate response procedures should impacts be identified, annual reporting, and an education program to encourage property owners to convert septic systems into areas capable of groundwater recharge.

Condition 103 – Verification of Retrofits

Prior to individual property connections to the wastewater system, each property owner shall provide verification that all toilets, showerheads and faucets have been replaced with high efficiency versions of the same.

Condition 108 – Water Meters

A water meter shall be installed on each legally established residential / commercial unit prior to connection to the wastewater treatment project. Property owners are required to provide verification to the County that the property has a meter or that one has been installed. Water usage information shall be made available to the sewer authority on a quarterly basis or on a schedule agreed to by the water purveyors and the County to verify the water savings derived from the water conservation program.

Condition Coastal 3, 3b – Habitat Management Plan

The Habitat Management Plan to be developed as a condition of the project will provide for restoration and enhancement of certain areas of Los Osos (see page 8 of Exhibit A) to self-sustaining natural habitat states, and for management and protection of such areas as habitat areas in perpetuity. "Success criteria" will be developed as part of the Plan for each habitat type, including in terms of species diversity, percent cover, invasive control, wildlife usage, and hydrology, and for potential public interpretive access, along with monitoring and reporting provisions on a short-term and long-term basis to ensure success criteria are met.

Condition Coastal 5 – Basin Recycled Water Management Plan

The objective of the Basin Recycled Water Management Plan shall be to ensure that implementation of the project, including the sites designated for disposal of the treated effluent, is accomplished in a manner designed to maximize long-term ground and surface water and related resource (including wetlands, streams, creeks, lakes, riparian corridors, marshes, etc.) health and sustainability, including with respect to offsetting seawater intrusion as much as possible, within the Los Osos Groundwater Basin. A monitoring program (Coastal 5c) is required for the Plan that is designed to quantitatively and qualitatively assess the effectiveness of the Plan over time to ensure its objectives are achieved, and is to include: a baseline physical and ecological assessment of ground and surface water and related resources to be monitored; measurable goals and interim and long-term success criteria for those resources, including at a minimum clear criteria that demonstrate that the health and sustainability of Plan area resources are steadily improving over time, including with respect to seawater intrusion; monitoring provisions, including identification of appropriate representative resource monitoring locations and data types (e.g., groundwater levels and quality; wetland, stream, creek, riparian, and marsh plant and animal abundance, hydrology, and water quality; etc.) and a schedule for proposed monitoring activities. The Monitoring Program shall also include measures to clearly document the manner in which recycled water is being reused and water is being conserved pursuant to the Recycled Water Reuse and Water Conservation Programs (Coastal 5a and b).

Interlocutory Stipulated Judgment (ISJ) Basin Management and Monitoring Requirements

The purpose of the ISJ is to establish a process for developing and implementing a Basin Management Plan (BMP) that will serve as a physical solution for the management of Basin water resources. The latest update from the ISJ Working Group (May 2010) outlines the goals and outcomes of their efforts, which includes a monitoring program developed in conjunction with the Los Osos Wastewater Project: “The BMP describes in detail the actions that will be taken in order to implement these goals. These actions include determination of Basin water supply and demand, establishment of a groundwater monitoring program, and an operations and recharge plan for the Basin, which will provide for management of salts and nutrients in the groundwater. These actions will be coordinated with the actions to be taken by the County as part of the Los Osos Wastewater Project (LOWWP).”

MBNEP Volunteer Monitoring Program

This program was started through collaboration between the Friends of the Estuary and the Morro Bay National Estuary Program (MBNEP) with a 3-year grant from the State for monitoring various environmental parameters in the estuary and its watershed. It has provided valuable data for establishing total maximum daily loads (TMDLs) for the estuary, and is the source for monitoring data used in the Pathogen TMDL Project for Morro Bay. Water quality parameters are monitored on a monthly basis at eight sites in the bay, four spring seep sites along the bay shoreline, and at thirteen sites in selected creeks within the watershed. The constituents monitored include pH, dissolved oxygen, temperature, turbidity, electrical conductivity, nitrate as nitrogen, orthophosphate, total coliform, e-coli, and enterococci. Other environmental parameters monitored by the MBNEP include storm water runoff (first flush), stream flow, stream profiling, macroinvertebrates, algal cover, phytoplankton, and shore birds.

Central Coast Ambient Monitoring Program

The Regional Water Quality Control Board’s Central Coast Region has been monitoring a suite of environmental parameters in coastal streams from San Mateo County to Santa Barbara County since 1997, including Chorro and Los Osos Creeks. The constituent suite varies based on funding levels but has included sediment loading, nutrient loading, pathogens and pathogen indicators, metals, pesticides, PCB’s, petroleum hydrocarbons, and others. Information collected by CCAMP, including data from other local monitoring programs, is used to update the CWA Section 305(b) report and the Section 303(d) listings every two years. These monitoring events are monthly. CCAMP is the local arm of the State Water Ambient Monitoring Program (SWAMP).

Storm Water Runoff Monitoring

From 1995-1998, the Central Coast Regional Water Quality Control Board performed annual water quality monitoring of storm water runoff at close to two dozen sites along the edges of the Morro Bay Estuary. Sample collected from these sites were analyzed for pH, temperature, dissolved oxygen, turbidity, electrical conductivity, filterable solids, petroleum hydrocarbons, nutrients, bacteria, and metals. Currently, the Morro Bay NEP Volunteer Monitoring Program operates a monitoring program that includes eight sites in Los Osos. Samples from the “first

flush” runoff of each precipitation year are collected for analysis of oil & grease, nitrates as nitrogen, orthophosphates as phosphorus, total dissolved solids, total suspended solids, dissolved metals (copper, lead, nickel and zinc), electrical conductivity, pH, turbidity, total coliforms and e-coli bacteria.

SLO County Water Level Monitoring

The San Luis Obispo County Department of Public Works monitors water levels at sites throughout the County on a semi-annual basis. Close to 45 wells in the Los Osos Valley ground water basin, including wells on the Morro Bay sand spit, are in the County monitoring program.

Los Osos Nitrate Monitoring Program

The Nitrate Monitoring Program operated from 1982-1998 under County staff, was reorganized in 2002, and was operated from 2002-2006 by the Los Osos CSD. Currently, the program is temporarily on hold pending reorganization of funding sources, but is anticipated to resume as a part of implementing the ISJ Working Group’s Basin Management Plan. The program consisted of quarterly water level and water quality monitoring at 25 shallow ground water wells across the basin. Water quality parameters included all forms of nitrogen, along with general minerals.

Water Purveyor Supply Well Monitoring

Community water purveyors in Los Osos include the Los Osos Community Services District, Golden State Water Company, and S & T Mutual Water Company. These purveyors measure water production, static and pumping water levels, and test their supply wells for general minerals, general physical parameters, organic and inorganic compounds, and bacteria. The minimum interval for water quality testing is three years, with more frequent testing required for specific constituents of concern, such as bacteria and nitrates. Water levels and production are constantly monitored in most wells.

Sea Water Intrusion Monitoring Program

Sea water intrusion in the lower aquifer poses a serious threat to the community water supply. The Los Osos Community Services District developed a sea water intrusion monitoring program that includes semi-annual water level measurements and periodic general mineral water quality monitoring at specific lower aquifer wells (Cleath & Associates, 2005, Sea Water Intrusion Assessment). Much of the data is collected through the county and water purveyor monitoring programs. The ISJ working group commissioned a Groundwater Basin Update that was released in May 2010 and included updated sea water intrusion monitoring. The recent monitoring showed that sea water intrusion rates had accelerated, both horizontal and vertical, since 2005. The monitoring was inconclusive as to the long term trends of sea water intrusion, due to recent drought conditions and the non-uniform permeability of the soils at the test wells. Regular sea water intrusion monitoring will be included in the Groundwater Basin Management Plan currently being developed under the groundwater litigation and adjudication process.

Performance Measures

Performance measures will be used to quantify and verify the success of the project in meeting goals. The following performance measures have been selected for each respective project goal:

Goal: Eliminate wastewater discharges from septic systems in high-density residential areas, including failing septic systems.

Performance Measure: This goal is achieved upon project implementation as flows are redirected from septic systems to the treatment plant. The performance measure is ultimately the number of septic tanks abandoned within the high-density residential areas, which will be documented through County records.

Goal: Reduce nitrate concentrations in ground water to below the drinking water standard.

Performance Measure:	The Los Osos Nitrate Monitoring Program and water purveyor supply well monitoring will provide multiple sites for documenting the anticipated reduction in dissolved nitrates in ground water. Once the wastewater project is on-line, the reduction in nitrate loading to the ground water basin should result in declining nitrate concentrations. The performance measure, therefore, will be a trend analysis of nitrate concentrations in shallow ground water monitoring wells, which should provide the earliest possible indicator of water quality improvement.
Goal:	Decrease pathogen levels in ground water seeps, storm water runoff, and Morro Bay Estuary.
Performance Measure:	The Morro Bay NEP Volunteer Monitoring Program, including their First Flush program, and CCAMP will provide multiple sites for evaluating changes in pathogen levels attributable to the project. The Kitts et al (2002) study of E-coli sources in and around Morro Bay Estuary showed the relative E-coli contribution of humans compared to birds, domestic mammals, livestock, wild mammals, and unknown sources. One particular sample set, the ground water seeps, showed a relatively high percentage (40%) of human-origin E-coli strains. By comparison, there were 17% human-origin strains found for all sample sets combined (oysters, bay sediment, bay water, creeks, and seeps). Therefore, the pathogen source with the greatest potential as a performance measure is ground water seeps, although storm water runoff E-coli were not part of the study and may also prove a useful measure.
Goal:	Reduce high water table conditions and flooding in low-lying areas, while preserving existing wetland habitat.
Performance Measure:	The Los Osos Nitrate Monitoring Program measures water table elevations in low-lying areas and will document the anticipated reductions in ground water elevations. Developing water level hydrographs at shallow monitoring wells throughout the urban area and comparing them to documented wetland areas will provide a suitable performance measure to assess this goal.
Goal:	Reduce average indoor water use to 50 gal/person/day through implemented water conservation measures.
Performance Measure:	After implementation of Conditions 99, 103, 108 and Coastal 5, water meter usage records will be evaluated to ensure this goal is being met.
Goal:	Recycle all collected wastewater and reuse within the groundwater basin area.
Performance Measure:	The quantity of collected wastewater will be compared to the quantity of treated effluent disposed of and reused within the basin to assess this goal.
Goal:	Increase the safe yield of the Los Osos Valley ground water basin.
Performance Measure:	Evaluating changes in basin safe yield following implementation of a project as large as the Los Osos Wastewater Project will require hydrogeologic analyses using monitoring information and ground water production data. The assistance of numerical flow modeling is anticipated in conjunction with ISJ Working Group efforts. The combination of the Basin Recycled Water Management Plan, County water level monitoring program, Los Osos Nitrate Monitoring Program, water purveyor well monitoring, and sea water intrusion monitoring program will provide the necessary data for evaluating changes to sustainable

yield attributable to the project. The most direct performance measures would be the reduction of lower aquifer production near the coast, and the increase in upper aquifer utilization. This shift in basin production is the cornerstone of developing the basin safe yield.

Goal: Mitigate sea water intrusion.

Performance Measure: The sea water intrusion monitoring program is specifically designed to evaluate changes in sea water intrusion in the lower aquifer. Data from the monitoring program would be used to re-evaluate trends in ion ratios at deep aquifer production wells. The Sea Water Intrusion Assessment (Cleath & Associates, 2005) showed that graphing these ion ratios over time are a powerful tool in identifying precursors to the arrival of sea water. Performance measures for sea water intrusion mitigation will include these ion ratio graphs and the results of ground water modeling to show both short-term success with actual field data and that long-term success is anticipated.

Goal: Improve the community's ability to manage water resources.

Performance Measure: This goal is achieved upon completion of the project infrastructure, which provide flexibility in wastewater management that was not available with septic systems in place. The actual management of the basin water resources will be carried out under the direction of the Interlocutory Stipulated Judgement, an agreement between the water purveyors and the County of San Luis Obispo. The performance measure of that increased ability for wastewater management will be the beneficial use of wastewater through reuse and implementation of conservation programs.

Table 6-1 provides a preview of the information that will be included in the Project Performance Monitoring Plan (PPMP) for the Los Osos Community Wastewater Project. The PPMP will be developed by the project proponent for use by the County in submitting reports required by the grant agreement. Preparation of the full PPMP will begin with review of the goals, measurement tools, etc. outlined in the following table.

Table 6-1: Project Performance Measures for the Los Osos Community Wastewater Project

Project Goals	Desired Outcomes	Output Indicators	Outcome Indicators	Measurement Tools and Methods	Targets
1. Eliminate wastewater discharges from septic systems in high-density areas, including failing septic systems	Divert effluent flow from in-town septic systems to wastewater treatment plants	1. Completeness and coverage of effluent collection system 2. Construction milestones	1. Flows recorded at wastewater treatment plants 2. Documentation of septic systems abandonment	Project contract documents and inspections	100% sewer service to RWQCB Prohibition Zone area of high-density septic systems
2. Reduce nitrate concentrations in the upper aquifer to below drinking water standards	Dissolved nitrate-nitrogen concentrations of less than 10 mg/l in ground water	1. Waste Discharge Order 2. Nitrogen mass loading evaluation of wastewater disposal	1. Nitrate concentrations in ground water 2. Nitrate concentrations trends	1. Nitrate Monitoring Program 2. Water purveyor supply well monitoring programs. 3. ISJ Working Group Basin Management Plan Monitoring Program 4. Basin Recycled Water Management Plan	Development of trends showing nitrate reductions in ground water
3. Decrease pathogen levels in ground water seeps, storm water runoff, and Morro Bay Estuary	Reduction of pathogen indicators commensurate with degree of impact by septic systems	1. Waste Discharge Order 2. Disinfection technology in wastewater treatment process 3. Spill/Runoff protection at disposal sites	1. Pathogen indicator levels in water samples 2. Pathogen indicator concentration trends	1. Morro Bay NEP Volunteer Monitoring Program 2. CCAMP (local SWAMP program) 3. Kitts et al., 2002 Morro Bay E-coli study. 4. Basin Recycled Water Management Plan	Development of trends showing pathogen indicator reductions in ground water seeps
4. Reduce high water table conditions and flooding in low-lying areas, while preserving existing wetland habitat	Increased separation between ground surface and water table in low-lying areas except for in existing wetland habitats	1. Completeness and coverage of effluent collection system 2. Construction milestones 3. Wetland habitat surveys	1. Ground water elevations in low-lying areas 2. Ground water elevation trends 3. Wetland habitat health	1. Nitrate Monitoring Program 2. County water level monitoring program 3. Groundwater Level Monitoring and Management Plan	Development of trends showing declining ground water elevations
5. Reduce average indoor water use to 50 gal/person/day through implemented water conservation measures	Indoor water use by those connected to the wastewater project of no more than 50 gallons per person per day	1. Usage data	1. Indoor water use trends 2. Retrofit records 3. Implementation of other conservation programs	1. Verification of Retrofits 2. Basin Recycled Water Management Plan – Conservation Water Conservation Program Monitoring and Reporting	Reduce average indoor water use to 50 gal/person/day
6. Recycle all collected wastewater and reuse within the groundwater basin area	Put treated wastewater to beneficial use within the basin to improve its sustainability	1. Metering and recording wastewater inflows 2. Metering and recording treated wastewater effluent flows to different locations for different purposes	1. Inflow and outflow records 2. Disposal/reuse records	1. Basin Recycled Water Management Plan – Recycled Water Reuse Program Monitoring and Reporting	100% reuse of treated wastewater flows in the Los Osos Valley ground water basin
7. Increase safe yield of Los Osos Valley ground water basin	Balance production between underutilized upper aquifer and overpumped lower aquifer	1. Water purveyor participation in wastewater project 2. Agricultural growers participation in wastewater project	1. Wastewater reuse 2. Production records by source aquifer	1. Basin ground water flow model simulations 2. County water level monitoring program 3. Water purveyor supply well monitoring programs 4. ISJ Working Group Basin Management Plan Monitoring Program	30% reduction in lower aquifer production on west side of basin within life of proposal
8. Mitigate sea water intrusion	Stop the inland advance of sea water into the lower aquifer	1. Water purveyor participation in wastewater project 2. Agricultural growers participation in wastewater project 3. Water conservation program	1. Dissolved ion ratio trends: (Cl/HCO ₃ ; Na/Cl, Ca/(SO ₄ +HCO ₃)) 2. Ground water elevations near coast	1. Sea Water Intrusion Monitoring Program 2. Basin ground water flow model with variable-density solute transport simulations 3. ISJ Working Group Basin Management Plan Monitoring Program	1. Reversal of historical ion ratio trends in lower aquifer wells 2. No further advance of sea water in ground water model simulations of managed basin
9. Improve the communities ability to manage water resources	Beneficial use of wastewater resource	1. Water purveyor participation in wastewater project and conservation programs 2. Construction milestones	1. Wastewater reuse 2. Implementation of conservation programs	1. ISJ Working Group Basin Management Plan Monitoring Program 2. Basin Recycled Water Management Plan	100% reuse of treated wastewater flows in the Los Osos Valley ground water basin

Flood Control Zone 1/1A First Year Vegetation and Sediment Management

Project Goals

The goals of the 1st Year Vegetation and Sediment Management Project of the Zone 1/1A Waterway Management Program simultaneously addresses urgently needed flood protection for the disadvantaged community of Oceano and protection of biological resources providing value to the State of California:

- Increase the existing flood carrying capacity of the channel to provide 5-year flood protection for District Zone 1/1A residents and agriculture.
- Protect biological resources, enhance and protect riparian habitats and habitats supporting sensitive plant or animal species.
- Improve function of flood control facilities and reduce the need for future maintenance.

Each goal is described below.

Increase the existing flood carrying capacity of the channel to provide 5-year flood protection for the District Zone 1/1A residents and agriculture.

Zone 1/1A is within the lower Arroyo Grande Creek floodplain, or Cienega Valley. The Cienega Valley is especially vulnerable to flooding because it lies at the downstream, lower gradient terminus of a highly erosive watershed. Much of the erosion occurring in the upper watershed results in sediment that is transported and delivered to the floodplains that make up the lower valley. Due to conversion of floodplain areas to agricultural and residential uses, and severe incision of Arroyo Grande Creek downstream of Lopez Dam, much of the sediment that was historically deposited on the floodplain ends up being deposited in backwater areas behind bridges, in small pocket flood plain areas, or in the lower gradient flood control reach which comprises Zone 1/1A.

Due to limited revenue sources and environmental restrictions, the County Public Works Department has not been able to perform maintenance, primarily vegetation and sediment removal, to sustain the channel's design capacity, so the existing channel has a severely reduced capacity and can only provide protection from the 2.8 year flow event (with 2 feet of freeboard). The current flood protection is inadequate. This was evidenced during the 2001 levee system breach on the south side which inundated hundreds of acres of farmland and several residences. The northern levee remained intact, thereby protecting several residential developments, as well as the regional wastewater treatment plant that services the communities of Arroyo Grande, Oceano and Grover Beach.

The 1st Year Vegetation and Sediment Management Project will improve the flow characteristics of the channel in the following ways:

1. Management of riparian vegetation to maintain a cross-sectional roughness of 0.04, and
2. Initial removal of accumulated sediment .

The project will provide necessary interim protection from the 5-year flood (with 2 ft of freeboard) for the residents and agricultural areas of Zone 1/1A until additional revenues or funding sources are acquired to implement the final component of the adopted Waterway Management Program which includes 2 phases of levee raises to restore the channel capacity to accommodate 20-year flood flows.

Protect biological resources, including riparian habitats and habitats supporting sensitive plant or animal species.

The goal of the vegetation management program is to maintain a balance between flood protection along lower Arroyo Grande Creek and protection of natural resources that rely on a healthy riparian corridor to protect important aquatic habitat. The vegetation management program as outlined in Attachment 3 accomplishes these objectives in the following ways:

1. Maintenance of a riparian buffer to create a continuous riparian canopy through the project area that provides benefit to terrestrial and aquatic species that rely on cover habitat, cool water temperatures, and other functions provided by a continuous and diverse riparian corridor.
2. Removal of invasive non-native species to improve the health of the riparian corridor.

Improve function of flood control facilities and reduce the need for future maintenance.

The goal of the sediment management activities is to increase flood capacity through the project reach while at the same time improving in stream aquatic habitat and reducing the need for sediment removal in the future. These goals will be achieved through an initial removal of previously built up sediment to create secondary overflow channels and integration of habitat enhancement structures consisting of large natural wood logs. The sediment management portion of this project will enhance geomorphic function, improve flood conveyance, and “set” the flood control channel to an initial condition that will enhance sediment transport and thereby reduce the need for future maintenance dredging.

Performance Measures

Performance measures will be used to quantify and verify the success of the project in meeting goals. The following performance measures have been selected for each respective project goal:

Goal:	Increase the existing flood carrying capacity of the channel to provide 5-year flood protection for District Zone 1/1A residents and agriculture.
Performance Measure:	The project will increase the level of flood protection by improving the channel flow characteristics and therefore a suitable performance measurement is an assessment of the cross-sectional roughness and volume achieved after project completion, as well as associated reduction in damage claims related to reduced frequency of flooding.
Goal:	Protect biological resources, including riparian habitats and habitats supporting sensitive plant or animal species.
Performance Measure:	The project will manage riparian vegetation to provide a continuous and diverse riparian corridor that will enhance water quality and special species habitat within the managed channel. Appropriate performance measures include increase of riparian canopy cover, increase riparian species richness and density, and reduction of invasive non-native species throughout the project area.
Goal:	Improve function of flood control facilities and reduce the need for future maintenance.
Performance Measure:	After initial sediment removal the system will be a self-maintaining system requiring only limited, periodic maintenance. Successful performance of the project would be achieved if future sedimentation in the project area does not reduce capacity in any one location beyond the defined freeboard at the baseline condition.

Table 6-2 provides a summary of the specific performance measures and associated monitoring program that have been identified to measure Project performance in meeting the overall goals as described above.

Completion of the proposed 1st year vegetation and sediment management project will provide the baseline, or starting ground, for the adopted WMP. Maintenance and/or improvement of this baseline will require activity within Arroyo Grande Creek over the long-term and in some cases on an annual basis. To maximize the benefit of these activities, reduce the costs to Zone 1/1A, and protect vital biological resources, long-term management will need to be adaptive to the conditions on site in any given year and will require a regulatory approach that is flexible within the objectives defined by the management program. An integral element of the management program is a

well-defined monitoring program that provides the data necessary, in a timely manner, to effectively manage the system. Chapter 4.0, Monitoring and Adaptive Management Plan, of the adopted WMP outlines the proposed Mitigation and Monitoring Plan that will guide long-term vegetation and sediment management within the flood control reach.

Table 6-2: Project Performance Measures for the Flood Control Zone 1/1A First Year Vegetation Management

Project Goals	Desired Outcomes	Output Indicators	Outcome Indicators	Measurement Tools and Methods	Targets
1. Increase the existing flood carrying capacity of the channel to provide 5-year flood protection for District Zone 1/1A residents and agriculture.	1. Increase the flood carrying capacity of the existing channels to contain 5-year flood flows 2. Reduction in costs associated with flooding	1. Completion of construction to remove dense vegetation outside the buffer areas and accumulated sediment. 2. Reduction in flood damages	1. Inspection of vegetation management to ensure adequate vegetation removal is achieved to improve channel cross-sectional roughness. 2. Inspection of sediment removal during construction to ensure removal of accumulated sediment is per plan and adequately maintains the existing primary low-flow channel and establishes proposed secondary overflow channels. 3. Reduction in damage claims and overtopping sightings	1. Review of before and after photos as well as field surveying during and after construction to determine type and approximate roughness of vegetation cover at designated locations in the project area (see attachment XX) to be used in evaluating the channel's composite roughness. 2. Topographical survey equipment to determine as-constructed channel cross sections and comparisons to design elevations. 3. Comparison of historic overtopping sightings and damage claims to post-construction sightings and claims	1. Removal of vegetation to achieve a channel cross-sectional composite roughness of 0.04. 2. Removal of 21,330 cubic yards of accumulated sediment to provide secondary overflow channels and increase flood capacity, as designed. 3. Associated reduction in damage claims related to reduced frequency of flooding.
2. Protect biological resources, including riparian habitats and habitats supporting sensitive plant or animal species.	1. Maintenance of a riparian buffer to create a continuous riparian canopy through the project area that provides benefit to terrestrial and aquatic species that rely on cover habitat, cool water temperatures, and other functions provided by a continuous and diverse riparian corridor. 2. Removal of invasive non-native species to improve the health of the riparian corridor.	1. Documentation of sensitive resources through the project area to include riparian canopy cover and riparian species diversity.	1. Issuance of of environmental resource agency permits. 2. Environmental monitoring provided during construction.	1. Measure canopy cover and species diversity throughout the project area. 2. Map presence of non-native invasive vegetation that occurs within the project reach. 3. Completion report submitted for Environmental Monitoring.	1. Practical minimization of impacts to biological resources. 2. Maintenance of a continuous riparian canopy. 3. Practical elimination of invasive species.
3. Improve function of flood control facilities and reduce the need for future maintenance.	Enhance geomorphic function, improve flood conveyance, and “set” the flood control channel to an initial condition that will enhance sediment transport and thereby become self maintaining.	Establishment of a primary low-flow channel and secondary overflow channels to promote a self maintaining system in which aggradation does not cause significant loss of capacity.	Inspection of sediment removal and habitat enhancement (log structures) during construction to ensure establishment of primary low-flow channel and secondary overflow channels is per plan.	1. Construction inspection and topographic surveying to complete as-constructed drawings and update channel cross-sections for input into hydraulic model. 2. Post construction review of sediment at designated locations (see attachment xx) using topographic surveying.	1. Completion of construction to improve scour velocities and reduce aggradation throughout the project area as verified by the updated hydraulic model. 2. Reduced dredging / maintenance.

Nipomo Waterline Intertie Project

Project Goals

The goals of the Nipomo Waterline Intertie Project include:

- Comply with the 2005 groundwater adjudication settlement stipulation and judgment (Exhibit B).
- Assist in stabilizing the groundwater levels in the NMMA
- Augment current water supplies available to the Nipomo Community Services District (NCSD)
- Augment current supplies available to the Woodlands Mutual Water Company (WMWC), Golden State Water Company (GSWC) and the Rural Water Company (RWC).
- Increase reliability of NCSD water supply.

Each goal is described below.

Comply with the 2005 groundwater adjudication settlement stipulation and judgment

Pursuant to the Stipulation, WMWC, GSWC and RWC agreed to participate in the Nipomo Waterline Intertie Project. As outlined in the Stipulation, the 2,500 AFY is to be divided up as follows:

NCSD	66.68% or 1,669 AFY
WMWC	16.66% or 415 AFY
GSWC	8.33% or 208 AFY
RWC	8.33% or 208 AFY

The Nipomo Waterline Intertie Project will implement the settlement stipulation and judgment.

Assist in stabilizing the groundwater levels in the NMMA

The project will provide 2500 AFY of supplemental water to offset current groundwater production in order to avoid further depletion and assist in balancing groundwater levels within the NMMA. NCSD, along with the other participating water purveyors, will be able to reduce groundwater pumping by 2500 AFY. Once the Nipomo Waterline Intertie Project is constructed and the delivery of supplemental water begins, it is anticipated that the groundwater levels within the NMMA will stabilize.

Augment current water supplies available to the Nipomo Community Services District

The Nipomo Waterline Intertie Project will provide 1,669 AFY of supplemental water to NCSD to offset current groundwater pumping within the NMMA in accordance with the settlement stipulation as well as an additional 500 AFY of supplemental water to serve future customers on currently vacant land within the existing NCSD boundaries. This imported water will serve existing and new development within the existing NCSD service area that would otherwise be served by groundwater supplies from the NMMA.

Augment current water supplies available to the Woodlands Mutual Water Company, Golden State Water Company and the Rural Water Company

The Nipomo Waterline Intertie Project will provide 415 AFY of supplemental water to the Woodlands Mutual Water Company to offset impact of the Woodlands development on groundwater pumping within the NMMA as well as 218 AFY of supplemental water to Golden State Water Company and 218 AFY of supplemental water to the Rural Water Company to offset current groundwater pumping in accordance with the settlement stipulation. This imported water will serve existing and new development within the existing service areas of these water purveyors that would otherwise be served by groundwater supplies from the NMMA.

Increase reliability of NCSD water supply

NCSD currently relies solely on groundwater within the NMMA and needs to reduce pumping in accordance with the settlement stipulation. By contrast, the City of Santa Maria water supply portfolio includes groundwater, water purchased from the State Water Project, and Twitchell Reservoir/commingled groundwater. The NCSD partnership with the City of Santa Maria on the Nipomo Waterline Intertie Project will improve NCSD's water supply reliability by establishing a connection with the City's water supply and increasing the diversity of NCSD's water supply.

Monitoring Program

The NMMA has established a monitoring program that has been approved by the Court that forms the basis for subsequent analyses of the basin to be included in annual reports for the NMMA. The monitoring parameters include groundwater elevations measured in wells, water quality measured in wells, precipitation, streamflow, surface water usage, surface water quality, land use to the extent differential uses impact the NMMA water budget, measured groundwater pumping, estimated groundwater pumping and wastewater discharge and reuse. Performance of the Nipomo Waterline Intertie Project will be monitored within the existing NMMA Monitoring Program. The Table of Contents from a recent NMMA Annual Report is included as Exhibit C.

Performance Measures

Performance measures will be used to quantify and verify the success of the project in meeting goals. The following performance measures have been selected for each respective project goal:

Goal:	Comply with the 2005 groundwater adjudication settlement stipulation and judgment.
Performance Measure:	The goal is achieved upon project start-up when delivery of supplemental water begins. The performance measure will be the quantity of water delivered to the Nipomo Waterline Intertie Project pump station.
Goal:	Assist in stabilizing the groundwater levels in the NMMA by reducing pumping in the NMMA
Performance Measure:	Evaluating changes in groundwater levels following implementation of the project will require collection and analyses of monitoring information including groundwater elevation, groundwater production, and other related data. The most direct performance measures would be the increase in groundwater levels within the NMMA and reduction in the quantity of groundwater pumped as measured at the NCSD's existing production wells.
Goal:	Augment current water supplies available to the Nipomo Community Services District
Performance Measure:	The goal is achieved upon project start-up when delivery of supplemental water begins. The performance measure will be the quantity of supplemental water delivered from the Nipomo Intertie Project pump station to the NCSD water distribution system.
Goal:	Augment current supplies available to the Woodlands Mutual Water Company, Golden State Water Company and the Rural Water Company
Performance Measure:	The goal is achieved upon project start-up when delivery of supplemental water begins. The performance measure will be the quantity of supplemental water delivered through connections to each of the partner purveyors.
Goal:	Increase reliability of NCSD water supply

Performance Measure: The goal is achieved upon project start-up when delivery of supplemental water begins. The performance measure is completion of the project.

Table 6-3 provides a preview of the information that will be included in the Project Performance Monitoring Plan (PPMP) for the Nipomo Waterline Intertie Project. The PPMP will be developed by the project proponent for use by the County in submitting reports required by the grant agreement. Preparation of the full PPMP will begin with review of the goals, measurement tools, etc. outlined in the following table.

Table 6-3: Project Performance Measures for the Nipomo Waterline Intertie Project

Project Goals	Desired Outcomes	Output Indicators	Outcome Indicators	Measurement Tools and Methods	Targets
1. Comply with the 2005 groundwater adjudication settlement stipulation and judgment	Satisfy stipulation requirements	Metered water flow through interconnect	Change in quantity of supplemental water delivered to NMMA	Monthly water meter reading	2000 AFY during first ten years of operation
2. Assist in stabilizing the groundwater levels in the NMMA	Sustainable use of the groundwater supply	Groundwater levels Well pumping output	Change in groundwater levels Change in groundwater pumping	Annual NMMA Report Monthly water meter readings	Increase in groundwater levels 2000 AFY decrease in groundwater pumping
3. Augment current water supplies available to the Nipomo Community Services District	Sustainable use of the groundwater supply	Metered flow to NCSD distribution system	Change in supplemental water delivered	Monthly meter readings	1334 AFY during first ten years of operation
4. Augment current supplies available to the Woodlands Mutual Water Company, Golden State Water Company and the Rural Water Company	Sustainable use of the groundwater supply	Metered flow through interconnects with partner purveyors	Change in supplemental water delivered	Monthly meter readings	666 AFY during first ten years of operation
5. Increase reliability of NCSD water supply	Reduce reliance on groundwater	Construction of project	Delivery of supplemental water	Start-up of delivery	2013 start-up

Condition 87	Groundwater Level Monitoring and Mgmt Plan
<p>Concurrent with the operation of the facility, the County shall implement the Groundwater Level Monitoring and Management Plan that details methods for measuring and responding to changes in groundwater levels that could affect wetland hydrology and habitat values. The Plan includes provisions for monitoring groundwater levels, surveys for wetland plant and animals, monitoring wetland hydrology and water quality, appropriate response procedures should impacts be identified, annual reporting, and an education program to encourage property owners to convert septic systems into areas capable of groundwater recharge.</p>	
<p>Evidence of compliance:</p>	

Condition Satisfied

Director, SLO County Planning

Director, California Coastal Commission

Date

Date

Condition 92	Habitat Conservation Plan (HCP)
	<p>Prior to providing wastewater treatment service to undeveloped parcels, the County, in coordination with the California Department of Fish and Game (CDFG), the US Fish and Wildlife Service (USF&WS), San Luis Obispo County and the California Coastal Commission shall prepare and implement a Habitat Conservation Plan (HCP) for the long-term preservation of habitat remaining within the Los Osos Greenbelt, including habitat remaining on individual vacant lots. The HCP shall:</p> <ul style="list-style-type: none"> a. identify the habitat resources and the quality of those resources on the remaining vacant properties within the South Bay Urban Area and Los Osos Greenbelt; b. specify measures to avoid and minimize impacts to ESHA from buildout of the Service area, and to mitigate unavoidable impacts through acquisition, protection, and/or restoration of equivalent habitat within the planning area; and c. implement such measures through an amendment to the Estero Area Plan that integrates the HCP, as approved by the US Fish and Wildlife Service and Department and Fish and Game, with LCP standards for development in the South Bay Urban Area. This LCP amendment must become fully effective, and all permits required by state and federal Endangered Species Acts shall be issued, before County makes any final commitment to provide wastewater treatment service to undeveloped properties. <p>The range of potential conservation programs to be considered in the HCP shall include, but not be limited to the following:</p> <ul style="list-style-type: none"> a. New development programs and standards that maximize preservation of sensitive biological resources in the Los Osos area, such as: <ul style="list-style-type: none"> i. Transfer of development credits ii. Clustering iii. Avoidance of sensitive resources in site design iv. Changes in density and land use v. Incorporation of open space into the design of new development b. Programs aimed at facilitating coordination among agencies and organizations involved in management and

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Date

conservation/preservation of sensitive resources, including USF&WS, CDFG, California Coastal Commission, San Luis Obispo County, MBNEP, Land Conservancy of San Luis Obispo County, and others;

- c. The creation of a land bank program to facilitate the purchase of properties with high quality habitat within the Greenbelt, to be repaid over time from fees on new building permits; and
- d. Programs for the acquisition of properties within the Greenbelt that contain significant habitat resources.

The County may apply for amendment to this permit condition at, or prior to the time that the treatment plant is operational, to authorize the County to issue Will Serve letters to properties that would otherwise qualify.

Evidence of compliance:

Condition 97	Treated Effluent Re-Use Sites
<p>Disposal of treated effluent shall be reserved for the following sites/uses in the Los Osos Groundwater Basin:</p> <ul style="list-style-type: none"> a. Broderson (not to exceed 448 AFY on an average annual basis), b. Urban re-use within the urban reserve line (as identified in the Effluent Re-Use and Disposal Tech Memo, July 2008), c. Agricultural re-use overlying the Los Osos Groundwater Basin, d. Environmental reservations (not less than 10% of the total volume of treated effluent). <p>Total agricultural re-use shall not be less than 10% of the total treated effluent. Disposal shall be prioritized to reduce seawater intrusion and return/retain water to/in the Los Osos groundwater basin. Highest priority shall be given to replacing potable water uses with tertiary treated effluent consistent with Water Code Section 13550.</p> <p>No amount of treated effluent may be used to satisfy or offset water needs that result from non-agricultural development outside the Urban Reserve Line of the community of Los Osos.</p>	
<p>Evidence of compliance:</p>	

Condition Satisfied

Director, SLO County Planning

Director, California Coastal Commission

Date

Date

Condition 99	Water Conservation Program
<p>Within one year of adoption of a due diligence resolution by the Board of Supervisors, electing to proceed with a wastewater project, a water conservation program shall be developed by the applicant in consultation with the local water purveyors within the prohibition zone for the community of Los Osos, that meets the goal of 50 gallons per day / per person for indoor use. The applicant shall provide 5 (five) million dollars of funding towards a water conservation program for indoor water conservation. Incentives shall be provided to homeowners and other property owners who install conservation measures within the first year.</p>	
<p>Evidence of compliance:</p>	

Condition Satisfied

Director, SLO County Planning

Director, California Coastal Commission

Date

Date

Condition 103	Verification of Retrofits
<p>Prior to individual property connections to the waste water system, each property owner shall provide verification to the satisfaction of the Planning Director that all toilets, showerheads and faucets have been replaced with high efficiency versions of the same.</p>	
<p>Evidence of compliance:</p>	

Condition Satisfied

Director, SLO County Planning

Director, California Coastal Commission

Date

Date

Condition 108	Water Meters
<p>Prior to individual property connections to the wastewater treatment project, each property owner shall provide verification to the satisfaction of the Public Works Department (in consultation with the Planning Director) that a water meter meeting American Water Works Association (AWWA) standards, and approved by the water company serving the individual property, has been installed or is existing on the connection site. A water meter shall be installed on each legally established residential / commercial unit prior to connection to the wastewater treatment project. Water usage information shall be made available to the sewer authority on a quarterly basis or on a schedule agreed to by the water purveyors and the County to verify the water savings derived from the water conservation program.</p>	
<p>Evidence of compliance:</p>	

Condition Satisfied

Director, SLO County Planning

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Date

Date

Coastal 3	Habitat Management Plan
<p>Habitat Management Plan. PRIOR TO CONSTRUCTION, the Permittee shall submit two copies of a Habitat Management Plan to the Executive Director for review and approval. The Habitat Management Plan shall provide for restoration and enhancement of the following areas to self-sustaining natural habitat states, and for management and protection of such areas as habitat areas in perpetuity:</p> <p>a. Broderson Site. The 80-acre Broderson site, of which up to 8 acres is allowed to be used for the project leach field provided this area too is subject to Plan requirements designed to ensure habitat value in this 8-acre area as much as possible while recognizing the underlying leach field infrastructure and its ongoing use and maintenance requirements.</p> <p>b. Giacomazzi Site. The 8.3 acres of the Giacomazzi site that is located outside of the approved development envelope and that includes identified wetland and related resources and their buffer (see Exhibit 8).</p> <p>c. Midtown Site. The 12.24-acre Midtown site (see Exhibit 2), of which a small area (approximately 0.10 acres, subject to special condition 1 requirements) is allowed to be used for the Midtown pump station and related development, provided this area, too, is subject to Plan requirements designed to ensure habitat value at the pump station location as much as possible while recognizing the underlying pump station infrastructure and its ongoing use and maintenance requirements.</p> <p>d. Pump Station Sites. The roughly 0.1-acre Sunny Oaks site, the 0.4-acre Solano site, and the 0.3-acre East Ysabel site (see Exhibit 2), a total of almost one acre, of which a small area at each site (approximately 0.32 total acres, subject to special condition 1 requirements) is allowed to be used for pump station and related development, provided these areas, too, are subject to Plan requirements designed to ensure habitat value at the pump station locations as much as possible while recognizing the underlying pump station infrastructure and its ongoing use and maintenance requirements.</p>	
<p>Evidence of compliance:</p>	

Condition Satisfied

Director, SLO County Planning

Director, California Coastal Commission

Date

Date

Coastal 3b	Habitat Management Plan-Requirements
	<p>The Habitat Management Plan shall be prepared by qualified restoration ecologists, shall be submitted with evidence of USFWS and CDFG review (or evidence that no review is required), and shall take into account the specific condition of each restoration and enhancement site (including soil, exposure, water flows, temperature, moisture, wind, etc.), as well as restoration and enhancement goals and success criteria. The Habitat Management Plan shall explicitly allow for potential public access interpretive facilities (including trails, signs/displays, etc.) even if such facilities are not part of initial Habitat Management Plan implementation activities, but rather will be a part of subsequent Plan implementation. At a minimum, the Plan shall provide for the following:</p> <p>a. Baseline. A baseline assessment, including photographs, of the current physical and ecological condition of the restoration and enhancement areas. All existing topography, habitat types, and vegetation shall be depicted on a map.</p> <p>b. Goals. A description of the goals of the plan, including in terms of topography, hydrology, vegetation, sensitive species, wildlife usage, and potential public interpretive access.</p> <p>c. Planting and Invasive/Non-Native Plant Provisions. Except that the mature eucalyptus trees, and the mature cypress trees on the Broderson site shall remain and be managed as part of the Plan, all invasive and/or non-native plant species shall be removed from all restoration and enhancement areas, and native species of local stock appropriate to the habitats and the Los Osos area shall be planted. A planting plan including the planting palette (seed mix and container plants), planting design, source of plant material, plant installation, erosion control, irrigation, and remediation shall be included. The planting palette shall be made up exclusively of native taxa that are appropriate to the habitats and the Los Osos region. Seed and/or vegetative propagules shall be obtained from local natural habitats so as to protect the genetic makeup of natural populations. Horticultural varieties shall not be used. Non-native and/or invasive plant species shall be prohibited. No plant species listed as problematic and/or invasive by the California Native Plant Society, the California Invasive Plant Council, or as may be so identified from time to time by the State of California, and no plant species listed as a 'noxious weed' by the State of California or the U.S. Federal Government shall be planted or allowed to naturalize or persist in the restoration and enhancement areas.</p> <p>d. Hydrology. Ensuring that existing hydrological inputs, if applicable (e.g. for wetland areas at the Giacomazzi site), are maintained and if possible improved in favor of enhanced habitat value. To the extent there may be hydrological issues related to the habitat that is being restored and monitored over time, these issues shall be considered and dealt with appropriately.</p>

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e. Success Criteria. A description of the measurable success criteria of the plan, including, at a minimum, the requirement that success be determined after a period of at least three years in which the sites have been subject to no remediation or maintenance activities other than weeding, and that this condition be maintained in perpetuity. Success criteria shall be defined for each habitat type, including in terms of species diversity, percent cover, invasive control, wildlife usage, and hydrology, and for potential public interpretive access. Interim and long-term success criteria shall be identified, with final success criteria required to be maintained in perpetuity.

f. Monitoring. Monitoring and maintenance provisions including a schedule of the proposed monitoring and maintenance activities to ensure that interim and long-term success criteria are achieved, and including a plan for documenting and reporting the physical and biological "as built" condition of the restoration and enhancement areas within 30 days of completion of the initial Habitat Management Plan implementation activities (i.e., a simple report to describe field implementation of the approved plan in narrative and photographs, and to report any implementation problems and their resolution). Monitoring shall be appropriate to habitat type, and shall at a minimum include identification of field sampling protocols (including specific field sampling techniques to be employed), study sites (including experimental/revegetation sites and reference sites), data analysis methods (including descriptive and inferential statistics with specified acceptable variance and significance levels to examine sample size, univariate and multivariate comparisons, and/or other parameters as appropriate and necessary to assess progress toward and meeting of success criteria), and assessment of progress toward meeting identified success criteria.

g. Reporting. Provision for submission of annual monitoring reports (two copies each time) to the Executive Director for review and approval beginning the first year after completion of initial Habitat Management Plan implementation activities and shifting to an every five-year reporting cycle once long-term success criteria have been achieved. Each report shall document the condition of each restoration and enhancement area based on monitoring data (including with photographs taken from the same fixed points in the same directions), shall describe the progress towards reaching and/or maintaining the success criteria of the plan, and shall make recommendations, if any, on changes necessary to achieve success. Necessary changes, including identified remediation steps, shall be completed per the timetable identified in any approved report, or within 30 days of report approval where no such timetable is specified.

The Habitat Management Plan shall be implemented concurrent with construction of the approved project, shall be directed by qualified restoration ecologists, and initial Habitat Management Plan implementation activities (including at a minimum initial planting and non-native/invasive plant removal pursuant to the Plan) shall be completed prior to commencement of operation of the approved project.

The Permittee shall undertake development in accordance with the approved Habitat Management Plan.

Evidence of compliance:

Coastal 5	Basin Recycled Water Management Plan
<p>Los Osos Basin Recycled Water Management Plan. PRIOR TO CONSTRUCTION, the Permittee shall submit two copies of a Los Osos Basin Recycled Water Management Plan (Basin Plan) to the Executive Director for review and approval. The objective of the Basin Plan shall be to ensure that implementation of the project, including the sites designated for disposal of the treated effluent, is accomplished in a manner designed to maximize long-term ground and surface water and related resource (including wetlands, streams, creeks, lakes, riparian corridors, marshes, etc.) health and sustainability, including with respect to offsetting seawater intrusion as much as possible, within the Los Osos Groundwater Basin. The Basin Plan shall be structured so as to allow its programs to be developed, and any physical development underlying the implementation of such programs constructed, concurrent with construction of the approved project, and for it to be implemented concurrent with commencement of operation of the approved project. The Basin Plan may be structured to allow phasing if necessary to better achieve Basin Plan objectives. The Basin Plan shall include the following main components:</p>	
<p>Evidence of compliance:</p>	

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Coastal 5a	Basin Recycled Water Management Plan- Recycled Water Re-Use Program
<p>a. Recycled Water Reuse Program. As reflected in County condition 97, the Recycled Water Reuse Program shall ensure that all tertiary treated recycled water is disposed of in locations within the Los Osos Groundwater Basin that will maximize its ability to meet Basin Plan objectives, where the highest priority for reuse shall be replacing existing potable water use with recycled water use where feasible and appropriate, including with respect to both urban and agricultural reuse. The Reuse Program may include recycled water application at the Broderson leach field (not to exceed 448 afy on an average annual basis) and at the Bayridge leach field (approximately 33 afy or the amount shown to be necessary for maintaining Willow Creek and downstream resources in their pre-project state or better), but it shall prioritize beneficial reuse through (a) developing and installing recycled water connections and entering into delivery/use agreements with urban and agricultural property owners as much as possible, and (b) developing and installing other recycled water delivery systems, in both cases with a priority for locations where such beneficial reuse will go the furthest toward meeting Basin Plan goals. The Reuse Program may include other areas that may be beneficial to the Los Osos Groundwater Basin.</p>	
<p>Evidence of compliance:</p>	

Condition Satisfied

Director, SLO County Planning

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Date

Date

Coastal 5b	Basin Recycled Water Management Plan-Water Conservation Program
<p>b. Water Conservation Program. The Water Conservation Program required by the County project, which limits indoor water use to no more than 50 gallons per person per day on average within the Basin, shall be incorporated into the Recycled Water Management Plan. The Program shall be designed to help Basin residents to reduce their potable water use as much as possible through measures including but not limited to retrofit and installation of low water use fixtures, and grey water systems. The Program shall include enforceable mechanisms designed to achieve its identified goals, including the 50 gallons per person per day target, and shall include provisions for use of the \$5 million committed by the Permittee to initiate water conservation measures pursuant to the Basin Plan as soon as possible following CDP approval. The Permittee shall coordinate with water purveyors to the maximum extent feasible to integrate this conservation program with purveyor implemented outdoor water use reduction measures.</p>	
<p>Evidence of compliance:</p>	

Condition Satisfied

Director, SLO County Planning

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Date

Date

Coastal 5c	Basin Recycled Water Management Plan-Monitoring Program
<p>c. Monitoring Program. The Monitoring Program shall be designed to quantitatively and qualitatively assess the effectiveness of the Basin Plan over time to ensure its objectives are achieved, and shall include: a baseline physical and ecological assessment of ground and surface water and related resources to be monitored; measurable goals and interim and long-term success criteria for those resources, including at a minimum clear criteria that demonstrate that the health and sustainability of Plan area resources are steadily improving over time, including with respect to seawater intrusion; monitoring provisions, including identification of appropriate representative resource monitoring locations and data types (e.g., groundwater levels and quality; wetland, stream, creek, riparian, and marsh plant and animal abundance, hydrology, and water quality; etc.) and a schedule for proposed monitoring activities. The Monitoring Program shall also include measures to clearly document the manner in which recycled water is being reused and water is being conserved pursuant to the Recycled Water Reuse and Water Conservation Programs.</p>	
<p>Evidence of compliance:</p>	

Condition Satisfied

Director, SLO County Planning

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Date

Date

Coastal 5d	Basin Recycled Water Management Plan- Reporting and Adaptive Management Program
<p>d. Reporting and Adaptive Management Program. Annual reports (two copies) documenting implementation and effectiveness of the Basin Plan shall be submitted to the Executive Director for review and approval by December 31st of each year that the project operates. Each report shall include all monitoring data (including documenting all recycled water reuse for the preceding year, all water conservation efforts and effects, and all resource changes identified), shall describe the progress towards achieving the success criteria of the plan, and shall make recommendations, if any, on changes necessary to better meet Basin Plan objectives and achieve success. On the latter, the annual reports shall be premised upon the concept of adaptive management that responds to information developed and effects better understood over time in association with the project, and is intended to allow for project changes covered by this CDP, unless the Executive Director determines that a CDP amendment is necessary, through the annual report approval process provided that such changes result in better resource protection and better means to achieve Basin Plan objectives over the long-term. Changes, including identified remediation steps, shall be completed per the timetable identified in any approved annual report, or within 30 days of report approval where no such timetable is specified.</p> <p>The Permittee shall undertake development in accordance with the approved Los Osos Basin Water Recycling Management Plan.</p>	
Evidence of compliance:	

Condition Satisfied

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Date

Date

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JAN 25 2008

KIRI TORRE
Chief Executive Officer/Clerk
Superior Court of CA County of Santa Clara
BY *[Signature]* DEPUTY
HOWENA A. WALKER

**SUPERIOR COURT OF CALIFORNIA
COUNTY OF SANTA CLARA**

SANTA MARIA VALLEY WATER
CONSERVATION DISTRICT,

Plaintiff,

vs.

CITY OF SANTA MARIA, ET AL.,

Defendants.

AND RELATED CROSS-ACTIONS AND
ACTIONS CONSOLIDATED FOR ALL
PURPOSES

**SANTA MARIA GROUNDWATER
LITIGATION**
Lead Case No. 1-97-CV-770214

(CONSOLIDATED FOR ALL
PURPOSES)

[Consolidated With Case Numbers:
CV 784900; CV 785509; CV 785522;
CV 787150; CV 784921; CV 785511;
CV 785936; CV 787151; CV 784926;
CV 785515; CV 786791; CV 787152;
1-05-CV-036410]

San Luis Obispo County Superior
Court Case Nos. 990738 and 990739

JUDGMENT AFTER TRIAL

This matter came on for trial in five separate phases. Following the third phase of trial, a large number of parties entered into a written stipulation dated June 30, 2005 to resolve their differences and requested that the court approve the settlement and make its terms binding on them as a part of any final judgment entered in this case. Subsequent to the execution of the stipulation by the original settling parties, a number of additional parties have agreed to be bound by the stipulation – their signatures are included in the attachments to this judgment.

1 The June 30, 2005 Stipulation is attached as Exhibit "1;" and all exhibits to the
2 Stipulation are separately attached as Exhibits "1A" through "1H". The Stipulating Parties are
3 identified on Exhibit "1A." The court approves the Stipulation, orders the Stipulating Parties
4 only to comply with each and every term thereof, and incorporates the same herein as though
5 set forth in full. No non-stipulating party is bound in any way by the stipulation except as the
6 court may otherwise independently adopt as its independent judgment a term or terms that are
7 the same or similar to such term or provision of the stipulation.

8 As to all remaining parties, including those who failed to answer or otherwise appear,
9 the court heard the testimony of witnesses, considered the evidence found to be admissible by
10 the court, and heard the arguments of counsel. Good cause appearing, the court finds and
11 orders judgment as follows.

12 As used in this Judgment, the following terms shall have the meanings herein set forth:

13 Basin – The groundwater basin described in the Phase I and II orders of the court, as
14 modified, with attachments and presented in Exhibit "1B".

15 Defaulting Parties – All persons or entities listed on Exhibit "3".

16 Imported Water – Water within the Basin received from the State Water Project,
17 originating outside the Basin, that absent human intervention would not recharge or be used in
18 the Basin.

19 LOG Parties – All persons or entities listed on Exhibit "2," listed under the subheading
20 "LOG Parties".

21 Non-Stipulating Parties – All Parties who did not sign the Stipulation, including the
22 Defaulting Parties and the LOG and Wineman Parties.

23 Parties – All parties to the above-referenced action, including Stipulating Parties, Non-
24 Stipulating Parties, and Defaulting Parties.

25 Public Water Producers – City of Santa Maria, Golden State Water Company, Rural
26 Water Company, the "Northern Cities" (collectively the Cities of Arroyo Grande, Pismo
27 Beach, and Grover Beach, and Oceano Community Services District), and the Nipomo
28 Community Services District.

1 Return Flows – All water which recharges the Basin after initial use, through the use of
2 percolation ponds and others means, derived from the use and recharge of imported water
3 delivered through State Water Project facilities.

4 Stipulating Parties – All Parties who are signatories to the Stipulation.

5 Stipulation – The Stipulation dated June 30, 2005 and incorporated herein as Exhibit
6 “1,” with each of its Exhibits separately identified and incorporated herein as Exhibits “1A”
7 through “1H”.

8 Storage Space – The portion of the Basin capable of holding water for subsequent
9 reasonable and beneficial uses.

10 Wineman Parties – All persons or entities listed on Exhibit “2,” under the subheading
11 “Wineman Parties”.

12 The following Exhibits are attached to this Judgment:

- 13 1. *Exhibit “1,”* June 30, 2005 Stipulation and the following exhibits thereto:
- 14 a. *Exhibit “1A,”* list identifying the Stipulating Parties and the parcels of
15 land bound by the Stipulation.
- 16 b. *Exhibit “1B,”* Phase I and II Orders, as modified, with attachments.
- 17 c. *Exhibit “1C,”* map of the Basin and boundaries of the three
18 Management Areas.
- 19 d. *Exhibit “1D,”* map identifying those lands as of January 1, 2005: 1)
20 within the boundaries of a municipality or its sphere of influence, or within the process of
21 inclusion in its sphere of influence; or 2) within the certificated service area of a publicly
22 regulated utility; and a list of selected parcels that are nearby these boundaries which are
23 excluded from within these areas.
- 24 e. *Exhibit “1E,”* 2002 Settlement Agreement between the Northern Cities
25 and Northern Landowners.
- 26 f. *Exhibit “1F,”* the agreement among Santa Maria, Golden State and
27 Guadalupe regarding Twitchell Project and the Twitchell Management Authority.
- 28 g. *Exhibit “1G,”* the court’s Order Concerning Electronic Service of

1 Pleadings and Electronic Posting of Discovery Documents dated June 27, 2000.

2 h. *Exhibit "IH,"* the form of memorandum of agreement to be recorded.

3 2. *Exhibit "2,"* List of Non-Stipulating LOG and Wineman Parties and recorded
4 deed numbers of property they owned at the time of trial.

5 3. *Exhibit "3,"* List of Defaulting parties.

6 **A declaratory judgment and physical solution are hereby adjudged and decreed**
7 **as follows:**

8 1. As of the time of trial, LOG and Wineman Parties owned the real property,
9 listed by assessor's parcel numbers, as presented in Exhibit 2.

10 2. The City of Santa Maria and Golden State Water Company are awarded
11 prescriptive rights to ground water against the non-stipulating parties, which rights shall be
12 measured and enforced as described below.

13 3. The City of Santa Maria and Golden State Water Company have a right to use
14 the Basin for temporary storage and subsequent recapture of the Return Flows generated from
15 their importation of State Water Project water, to the extent that such water adds to the supply
16 of water in the aquifer and if there is storage space in the aquifer for such return flows,
17 including all other native sources of water in the aquifer. The City of Santa Maria's Return
18 Flows represent 65 percent of the amount of imported water used by the City. Golden State
19 Water Company's Return Flows represent 45 percent of the amount of imported water used by
20 Golden State in the basin.

21 4. (a) The Northern Cities have a prior and paramount right to produce 7,300 acre-
22 feet of water per year from the Northern Cities Area of the Basin; and (b) the Non-Stipulating
23 Parties have no overlying, appropriative, or other right to produce any water supplies in the
24 Northern Cities Area of the Basin.

25 5. The Groundwater Monitoring Provisions and Management Area Monitoring
26 Programs contained in the Stipulation, including Sections IV(D) (All Management Areas);
27 V(B) (Santa Maria Management Area), VI(C) (Nipomo Mesa Management Area), and VII (1)
28 (Northern Cities Management Area), inclusive, are independently adopted by the court as

1 necessary to manage water production in the basin and are incorporated herein and made terms
2 of this Judgment. The Non-Stipulating Parties shall participate in, and be bound by, the
3 applicable Management Area Monitoring Program. Each Non-Stipulating Party also shall
4 monitor their water production, maintain records thereof, and make the data available to the
5 court or its designee as may be required by subsequent order of the court.

6 6. No Party established a pre-Stipulation priority right to any portion of that
7 increment of augmented groundwater supply within the Basin that derives from the Twitchell
8 Project's operation.

9 7. The court determines that there is a reasonable likelihood that drought and
10 overdraft conditions will occur in the Basin in the foreseeable future that will require the
11 exercise of the court's equity powers. The court therefore retains jurisdiction to make orders
12 enforcing the rights of the parties hereto in accordance with the terms of this judgment.

13 a. Groundwater

14 i. The overlying rights of the LOG and Wineman Parties shall be
15 adjusted by amounts lost to the City of Santa Maria and Golden State Water Company by
16 prescription. The prescriptive rights of the City of Santa Maria and Golden State Water
17 Company must be measured against the rights of all overlying water producers pumping in the
18 aquifer as a whole and not just against the LOG and Wineman Parties because adverse
19 pumping by the said water producers was from the aquifer as a whole and not just against the
20 non-stipulating parties. The City of Santa Maria established total adverse appropriation of
21 5100 acre feet per year and Golden State Water Company established adverse appropriation of
22 1900 acre feet a year, measured against all usufructuary rights within the Santa Maria Basin.
23 The City of Santa Maria and Golden State Water Company having waived the right to seek
24 prescription against the other stipulating parties, may only assert such rights against the non
25 stipulating parties in a proportionate quantity. To demonstrate the limited right acquired by
26 the City of Santa Maria and Golden State Water Company, by way of example, if the
27 cumulative usufructuary rights of the LOG and Wineman Parties were 1,000 acre-feet and the
28 cumulative usufructuary rights of all other overlying groundwater right holders within the

1 Basin were 100,000 acre-feet, the City of Santa Maria and Golden State Water Company
2 would each be entitled to enforce 1% of their total prescriptive right against the LOG and
3 Wineman Parties. That is, Golden State Water Company could assert a prescriptive right of
4 19 annual acre-feet, and the City of Santa Maria 51 annual acre-feet, cumulatively against the
5 LOG and Wineman Parties, each on a proportionate basis as to each LOG and Wineman
6 Party's individual use.

7 ii. The Defaulting Parties failed to appear at trial and prove any
8 usufructuary water rights. The rights of the Defaulting Parties, if any, are subject to the
9 prescriptive rights of the City of Santa Maria and Golden State Water Company, as well as the
10 other rights of said parties as established herein.

11 b. Imported Water

12 The City of Santa Maria and Golden State Water Company shall have rights to Return
13 Flows in the amount provided above.

14 c. Northern Cities

15 The rights of all Parties in the Northern Cities Management Area shall be governed as
16 described above on page 4, lines 21 to 24.

17 8. The LOG and Wineman Parties have failed to sustain the burden of proof in
18 their action to quiet title to the quantity of their ground water rights as overlying owners. All
19 other LOG and Wineman party causes of action having been dismissed, judgment is hereby
20 entered in favor of the Public Water Producers as to the quiet title causes of action brought by
21 the LOG and the Wineman Parties. Legal title to said real property is vested in the Log and
22 Wineman Parties and was not in dispute in this action.

23 9. Each and every Party, their officers, agents, employees, successors and assigns,
24 are enjoined and restrained from exercising the rights and obligations provided through this
25 Judgment in a manner inconsistent with the express provisions of this Judgment.

26 10. Except upon further order of the court, each and every Party and its officers,
27 agents, employees, successors and assigns, is enjoined and restrained from transporting
28 groundwater to areas outside the Basin, except for those uses in existence as of the date of this

1 Judgment; provided, however, that groundwater may be delivered for use outside the Basin as
2 long as the wastewater generated by that use of water is discharged within the Basin, or
3 agricultural return flows resulting from that use return to the Basin.

4 11. Jurisdiction, power and authority over the Stipulating Parties as between one
5 another are governed exclusively by the Stipulation. The court retains and reserves
6 jurisdiction as set forth in this Paragraph over all parties hereto. The court shall make such
7 further or supplemental orders as may be necessary or appropriate regarding interpretation and
8 enforcement of all aspects of this Judgment, as well as clarifications or amendments to the
9 Judgment consistent with the law.

10 12. Any party that seeks the court's exercise of reserved jurisdiction shall file a
11 noticed motion with the court. Any noticed motion shall be made pursuant to the court's
12 Order Concerning Electronic Service of Pleadings and Electronic Posting of Discovery
13 Documents dated June 27, 2000.

14 13. The court shall exercise *de novo* review in all proceedings. The actions or
15 decisions of any Party, the Monitoring Parties, the TMA, or the Management Area Engineer
16 shall have no heightened evidentiary weight in any proceedings before the court.

17 14. As long as the court's electronic filing system remains available, all court
18 filings shall be made pursuant to court's Order Concerning Electronic Service of Pleadings
19 and Electronic Posting of Discovery Documents dated June 27, 2000, or any subsequent
20 superseding order. If the court's electronic filing system is eliminated and not replaced, the
21 Parties shall promptly establish a substitute electronic filing system and abide by the same
22 rules as contained in the court's Order.

23 15. Nothing in this Judgment shall be interpreted as relieving any Party of its
24 responsibilities to comply with state or federal laws for the protection of water quality or the
25 provisions of any permits, standards, requirements, or order promulgated thereunder.

26 16. Each Party shall designate the name, address and e-mail address, if any, to be
27 used for purposes of all subsequent notices and service by a designation to be filed within
28 thirty days after entry of this Judgment. This designation may be changed from time to time

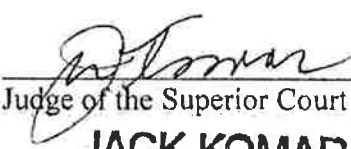
1 by filing a written notice with the court. Any Party desiring to be relieved of receiving notices
2 may file a waiver of notice on a form approved by the court. The court shall maintain at all
3 times a current list of Parties to whom notices are to be sent and their addresses for purposes
4 of service. The court shall also maintain a full current list of names, addresses, and e-mail
5 addresses of all Parties or their successors, as filed herein. Copies of such lists shall be
6 available to any Person. If no designation is made, a Party's designee shall be deemed to be, in
7 order of priority: i) the Party's attorney of record; ii) if the Party does not have an attorney of
8 record, the Party itself at the address specified.

9 17. All real property owned by the Parties within the Basin is subject to this
10 Judgment. The Judgment will be binding upon and inure to the benefit of each Party and their
11 respective heirs, executors, administrators, trustees, successors, assigns, and agents. Any
12 party, or executor of a deceased party, who transfers property that is subject to this judgment
13 shall notify any transferee thereof of this judgment and shall ensure that the judgment is
14 recorded in the line of title of said property. This Judgment shall not bind the Parties that
15 cease to own property within the Basin, and cease to use groundwater. Within sixty days
16 following entry of this Judgment, the City of Santa Maria, in cooperation with the San Luis
17 Obispo entities and Golden State, shall record in the Office of the County Reporter in Santa
18 Barbara and San Luis Obispo Counties, a notice of entry of Judgment.

19 The Clerk shall enter this Judgment.

20
21 SO ORDERED, ADJUDGED, AND DECREED.

22
23 Dated: January 25, 2008



Judge of the Superior Court
JACK KOMAR

Nipomo Mesa Management Area

2nd Annual Report
Calendar Year 2009

Prepared by
NMMA Technical Group

Submitted June 2010

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